

C4.8T, C.6.8T, C8.1T

User's Guide



The Martin Experience



Installation Guide

Martin Audio Ceiling Loudspeakers C4.8T, C6.8T, C8.1T




Description

Martin Audio C4.8T, C6.8T and C8.1T ceiling loudspeakers are all 2-way designs using soft dome tweeters for the widest dispersion and excellent off-axis performance. All models have perforated steel grilles, UL94 V-0 baffle materials, steel back cans and feature rising clamp connectors that accept up to 2.5sqm conductors.

Unpacking

Thank you for purchasing a Martin Audio ceiling loudspeaker system. Every Martin Audio product is built to the highest standard and thoroughly inspected before it leaves the factory. After unpacking, examine the product carefully. Inform your dealer if transit damage is found. We suggest that you retain the original packaging so that the system can be repacked at a future date if necessary. Martin Audio and its distributors cannot accept responsibility for product damaged through the use of non-approved packaging.

Compliance

 <p>These products conform to:</p> <p>EMC Directive 89/336/EEC Low Voltage Directive 73/23/EEC</p>	<p>These products comply with UL2043 Fire Tests for Heat & Visible Smoke Release for Discrete Products and their Accessories Installed in Air Handling Spaces.</p> <p>Listed UL1480 General Signaling Speakers.</p> <p>SUITABLE FOR USE IN AIR HANDLING SPACES</p>  <p>General Signaling Equipment 3JTM</p>
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See page 3 for recommended ceiling hole sizes >>

A steel cover plate with a clamped cable entry protects the input connector against fire in accordance with BS5839: Part 8, Section 10.3.

All models are fitted with a thermal fuse to prevent the loudspeaker from short circuiting and disabling other loudspeakers in its group under the influence of fire.

Model	Drivers	Dispersion
C4.8T	4" (100mm) LF 0.75" (19mm) HF	180deg
C6.8T	6.5" (165mm) LF 0.75" (19mm) HF	150deg
C8.1T	8" (200mm) LF 1" (25mm) HF	90deg

The exceptionally wide mid-high dispersion of the Martin Audio C4.8T and C6.8T makes them particularly suitable for low ceilings.

Voltage & power settings

All models are 16ohms direct or via line transformers selected with a baffle-mounted switch for 100V or 70V operation as follows:



**Baffle switch
(C6.8T shown)**

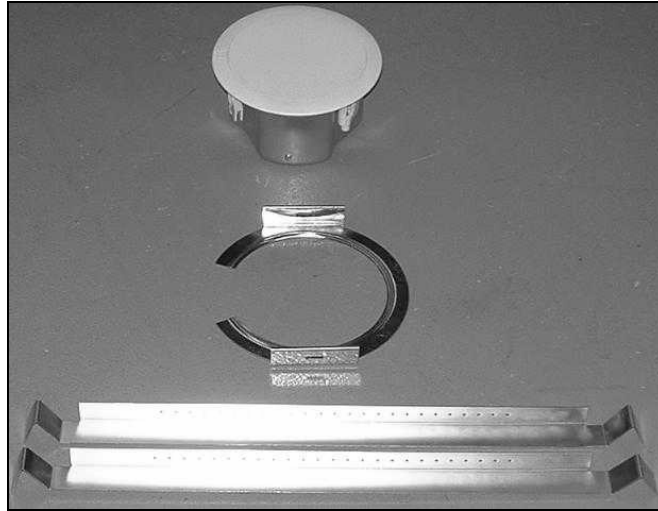


Baffle switch location

Model	16ohm	100V operation	70V operation
C4.8T	40W	25W, 12.5W, 6W	25W, 12.5W, 6W, 3W
C6.8T	75W	40W, 20W, 10W	40W, 20W, 10W, 5W
C8.1T	125W	60W, 30W, 15W	60W, 30W, 15W, 7.5W

Note that all models are protected with a PTC (positive temperature coefficient) device and will quieten, if overdriven. The PTC device will reset itself once the signal is reduced to a more sensible level.

Installation



**Ceiling loudspeaker with C-bracket
and tile rails (foreground)**

Please note carefully

- ✚ Martin Audio ceiling loudspeakers must be installed by experienced ceiling loudspeaker installation personnel using the full installation kit provided
- ✚ The installer must check with all relevant local, national and international electrical, fire and building safety authorities to ensure that all regulations are being complied with
- ✚ Every ceiling loudspeaker must be fitted with a steel safety wire between its rear can safety tag and a suitable overhead supporting structure to provide backup support in the event of ceiling damage
- ✚ When installed in an air handling space the steel cover plates must be sealed to the loudspeaker back cans with firestop putty or a suitable alternative to ensure plenum tight enclosure of the electrical connections

Step 1

Cut the ceiling hole as follows using the template provided:

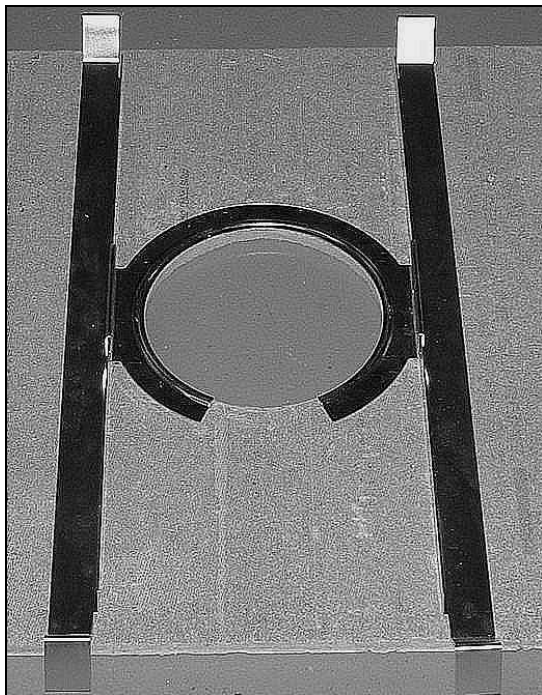
- C4.8T** 178mm dia cut-out
- C6.8T** 224mm dia cut-out
- C8.1T** 308mm dia cut-out

Suitable hole cutting methods will depend on the ceiling structure, local conditions, personnel, equipment etc and must be determined by the installer.

Step 2

Place a tile rail either side of the ceiling hole and clip the C-bracket over the upright edges of the tile rails.

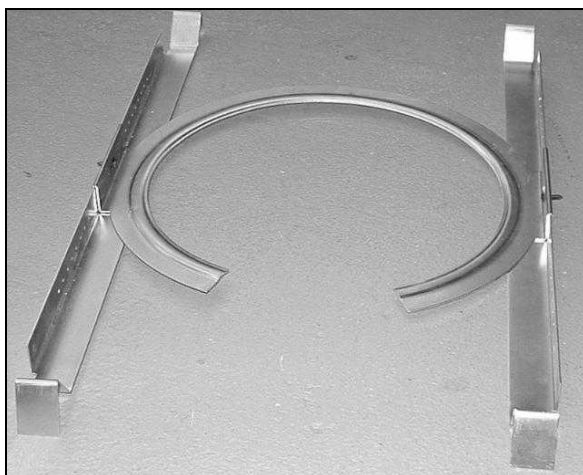
Note the rail orientations – outwards for the C4.8T and C6.8T, inwards for the C8.1T.



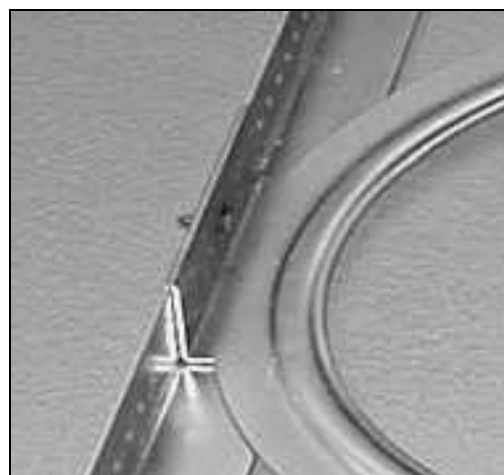
**C4.8T & C6.8T rail orientation
(rails placed outwards)**



C-bracket clipped over rail

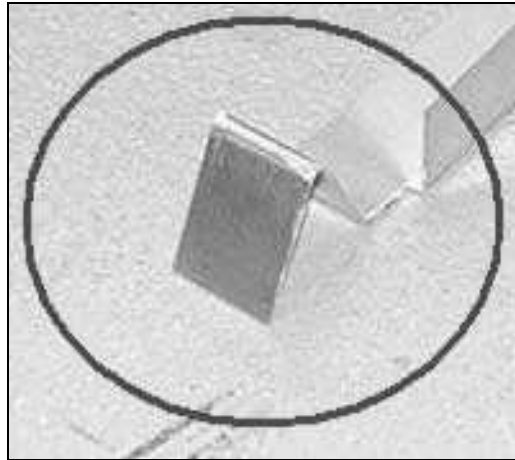


**C8.1T rail orientation
(rails placed inwards)**



C-bracket clipped over rail

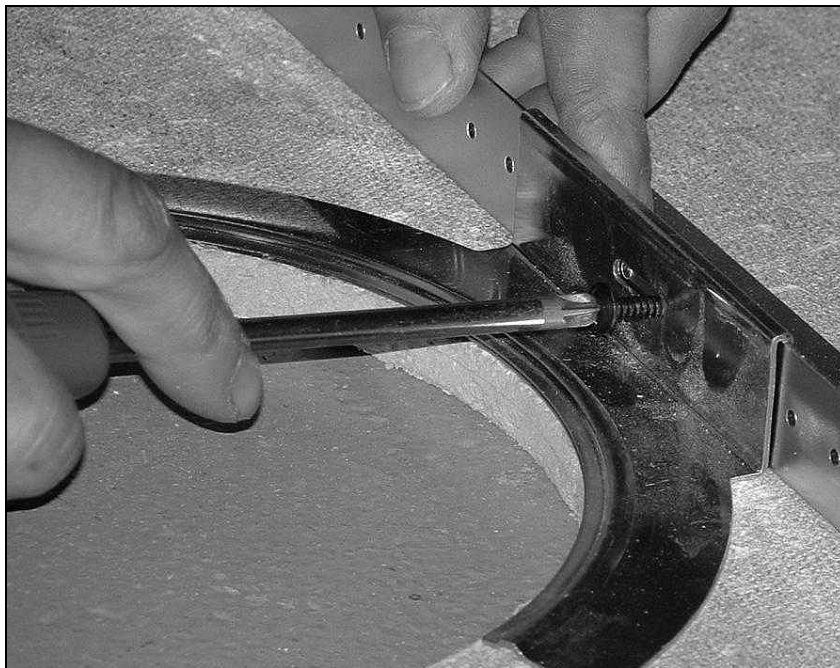
Note that the tile rail ends may be reshaped to suit your particular ceiling structure.



Tile rail end

Step 3

Screw the C-bracket to the tile rails with the screws provided.



C-bracket screwed to tile rail

Step 4

Place the loudspeaker into the ceiling hole (and through the centre of the C-bracket) from the underside. Align the loudspeaker so that an imaginary line between the woofer and tweeter runs along the corridor or concourse. This provides the smoothest sound coverage.



2-way ceiling loudspeaker orientation

Make sure that the C4.8T and C6.8T swivel-tabs do not coincide with the C-bracket gap.



Loudspeaker in place.

Note swivel-tab positions before fully tightening

It is permissible for one of the five C8.1T swivel-tabs to coincide with a C-bracket gap in order to maintain driver orientation.

Step 5

Screw the loudspeaker to the C-bracket by tightening the screws from the underside of the baffle.

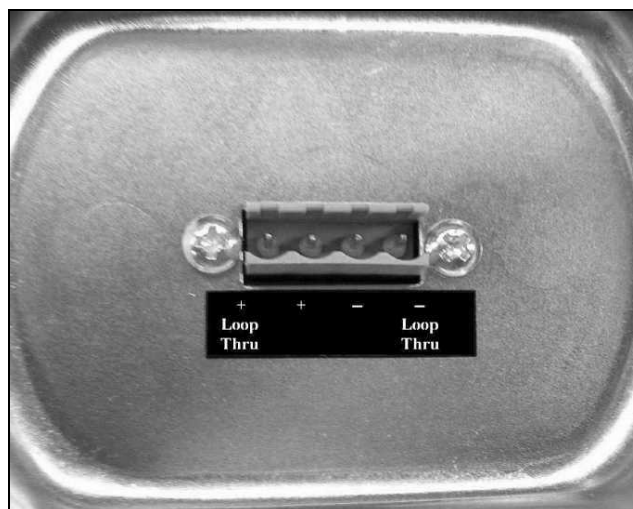


Tightening the swivel-tab screws

Step 6

Connect your pre-installed amplifier cable to the ceiling loudspeaker.

Amplifier power input is via a 4-pin rising clamp plug providing **+ and – inputs** and **+ and – Loop Through** connections at the top of the loudspeaker can.



Input & Loop Through connector

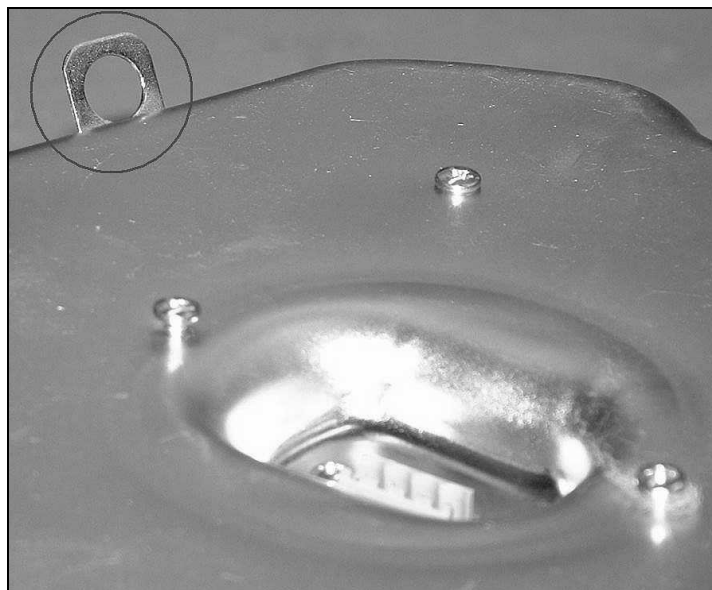
The input and loop connectors must be fireproofed using the steel cover and screws provided. This cover has a 0.75" (19mm) knockout and a clamped cable entry.



**Ceiling loudspeaker rear can
– fireproof steel cover fitted**

Step 7

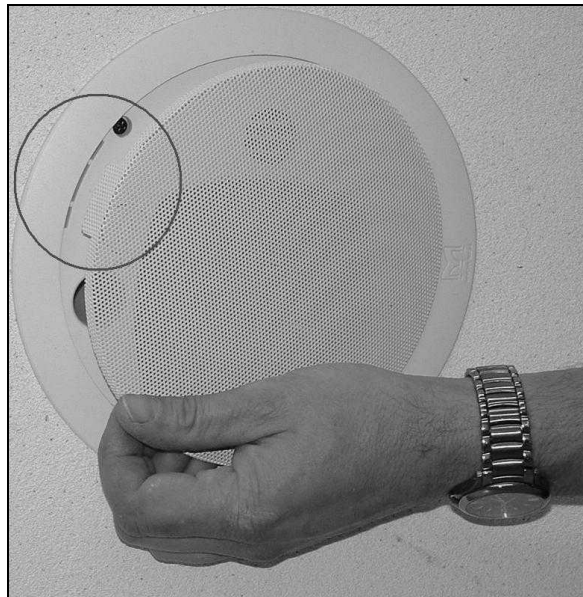
Fit a steel safety wire between its rear can safety tag and a suitable overhead supporting structure to provide backup support in the event of ceiling damage.



Safety tag location

Step 8

Push the grille into position ensuring that the grille is properly located in the baffle slots.



Locate grille tags into slots

Your Martin Audio ceiling loudspeaker is now ready for use.

Warranty

Martin Audio ceiling loudspeaker products are warranted against manufacturing defects in materials or craftsmanship over a period of 5 years from the date of original purchase.

During the warranty period Martin Audio will, at its discretion, either repair or replace products which prove to be defective provided that the product is returned in its original packaging, shipping prepaid, to an authorised Martin Audio service agent or distributor.

Martin Audio Ltd. cannot be held responsible for defects caused by unauthorised modifications, improper use, negligence, exposure to inclement weather conditions, act of God or accident, or any use of this product that is not in accordance with the instructions provided by Martin Audio. Martin Audio is not liable for consequential damages.

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